

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A method for joining bodies (41, 50, 51, 65, 66) by means of thermally melting a joining element (1, 20, 30, 52, 67, 75, 80), wherein the joining element (1, 20, 30, 52, 67, 75, 80), by means of a directed force (F), acts on a surface (4, 40, 59) of at least one of the bodies (41, 50, 51, 65, 66), penetrates the surface as a result of the directed force (F), and, once the surface has been penetrated, a mechanical excitation is generated such that during a further penetration of the joining element (1, 20, 30, 52, 67, 75, 80) into the at least one body (41, 50, 51, 65, 66) the advance movement is maintained through the directed force (F) and the melting down is maintained through the mechanical excitation, so that molten material is hydraulically displaceable into the surroundings.
2. (Amended) The method in accordance with claim 1, wherein the mechanical excitation is applied after at least one of a predetermined depth of penetration of the joining element (1, 20, 30, 52, 67, 75, 80) into one of the bodies (41, 50, 51, 65, 66) has been achieved or after a predetermined load level of the directed force (F) has been reached.
3. (Amended) The method according to claim 2, wherein the mechanical excitation takes place by means of ultrasound.
4. (Amended) The method in accordance with claim 2, wherein the mechanical excitation takes place by means of rotation.

5. (Amended) The method according to claim 1, wherein a secondary movement is superimposed on the penetration of the joining element (1, 20, 30, 52, 67, 75, 80) into one of the bodies (41, 50, 51, 65, 66), the secondary movement assisting the penetration.

6. (Amended) The method in accordance with claim 5, wherein the secondary movement represents a rotation.

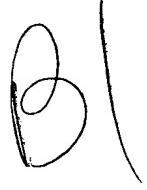
7. (Amended) The method according to claim 1, wherein at least two bodies (41, 50, 51, 65, 66) are joined by means of a joining element (1, 20, 30, 52, 67, 75, 80).

8. (Amended) The method in accordance with claim 7, wherein, between common surfaces (59, 60) of the bodies to be joined (41, 50, 51, 65, 66), an additional layer made out of a meltable material is present, said additional layer, as a result of the mechanical excitation melts and assists in sealing the mechanical joint between the bodies (41, 50, 51, 65, 66).

9. (Amended) The method according to claim 7, wherein one of the bodies (41, 50, 51, 65, 66) comprises a bore (53) for receiving a joining element (52).

10. (Amended) The method in accordance with claim 1, wherein at least one of the bodies to be joined (41, 50, 51, 65, 66) consists of porous material.

11. (Amended) A joining element (20) for utilization in the method of claim 1, wherein the joining element (20) contains thermo-plastic material, is pin shaped and comprises at least one zone with a smaller cross section and at least one zone with a bigger

cross section.

12. (Amended) The joining element (20) according to claim 11, wherein the joining element (20) comprises a round (20a) and/or a polygonal cross section.

13. (Amended) The joining element (20) in accordance with claim 11, wherein the joining element (20) comprises a pointed or a flattened end for pushing through a surface.

14. (Amended) The joining element (20) according to claim 11, wherein the joining element (20) comprises a sharp edge (23), which increases the cutting effect when pushing through a covering layer (4).

15. (Amended) The joining element (20) in accordance with claim 11, wherein the joining element (20) comprises direction-giving elements for energy in the shape of longitudinally aligned ribs (25).

16. (Amended) A joining element (30) for utilization in the method according to claim 1, wherein the joining element (30) comprises a cylindrical part (31) with a pointed element (32) centrally arranged on the one face of the cylindrical part, and which pointed element is surrounded by a ring of elements (34) arranged in a circle around it.

17. (Amended) The joining element (30) in accordance with claim 16, wherein the elements (34) arranged in a circle comprise edges (35), which serve to push through a surface (40).

18. (Amended) The joining element (30) according to claim 16, wherein the joining element (1, 20, 30, 52, 67, 75, 80) serves for receiving a fixing element or a hinge.

19. (Amended) A joint manufactured in accordance with the method according to claim 1, with one or several joining elements in accordance with claim 11, wherein melted down material of a joining element (67) is hardened within the structure of a compressed base material of a body (66).

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